

Date: Wednesday, May 12, 2021

To: Central Zone: Family, Pediatric, Emergency Department, Internal Medicine Physicians; Nurse Practitioners; U. of A. Rural Family Medicine Program; Emergency and Urgent Care Staff

Cc: Central Zone: Indigenous Health Senior Advisor; Medical Affairs; Acute Care Pharmacies; Area Directors; Executive Directors; Red Deer Directors; Workplace Health and Safety; Lab; Infection Prevention Control; Public Health Nursing; Environmental Public Health; Emergency Medical Services

Provincial: FNIHB; Chief Medical Officer of Health; AHS Medical Officers of Health; Notifiable Diseases

From: Dr. Digby Horne on behalf of Central Zone Medical Officers of Health

Please be advised that in April 2021, three cases of acute rheumatic fever were identified in Central Zone Indigenous children ranging in age from 7-12 years.

All three cases have presented with chorea (involuntary movements) and carditis involving the mitral and/or aortic valve; erythema marginatum (rash) was present in a single case. None have had group A streptococcus (GAS) identified on throat culture, but all three cases have an elevated anti-streptolysin antibody titre. Suspected streptococcal infections likely preceded diagnosis by several weeks or months.

Diagnosis for Rheumatic Fever is based on Revised Jones Criteria

Major criteria include	Minor Criteria include
<ul style="list-style-type: none">• carditis (includes subclinical changes identified on echocardiography)• arthritis• chorea• subcutaneous nodules• erythema marginatum	<ul style="list-style-type: none">• arthralgia• fever $\geq 38^{\circ}\text{C}$• C-reactive protein $\geq 30\text{mg/L}$• prolonged PR interval.

Evidence of a GAS infection via positive throat swab or elevated ASOT is helpful but not necessary. Further information on diagnostic criteria can be found at: www.cdc.gov/groupastrep/diseases-hcp/acute-rheumatic-fever.html.

To reduce the chance of missing group A streptococcal pharyngitis in children during the COVID-19 pandemic, it is suggested that patients in whom COVID-19 is initially suspected but who test negative be asked to return for a bacterial throat swab if symptoms persist.

Antibiotic treatment for acute rheumatic fever is recommended even in the absence of pharyngitis to eradicate carriage; treatment of fever, arthritis, and carditis should be given as necessary, and prophylactic therapy with penicillin is recommended to prevent recurrences. Testing and treatment of positive household contacts, hand hygiene, cough etiquette, and reducing crowding are recommended for prevention.

Please report any cases to the Central Zone Medical Officer of Health on-call: (403) 356-6430.

Thank you for your attention and assistance.